

**Work Order ID 71883**

Wednesday, July 13, 2011 11:09:10 AM



Page 1

Item ID: D3488-042

Accept



Setup Start



Revision ID:

Item Name: Blade Fitting Assembly, RH

Stop



Start Date: 7/14/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan: *YPL*

Date: 11-07-13

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
	DOOSAN LATHE								
Doosan	Memo	0.00							
Doosan Lathe	I-Turn as per Dwg DSK 101 & Folio FA627-2-Deburr								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	Memo	0.00							
Quality Control									
120		0.00							
	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	I-Machine as per Folio FA627 & Dwg D3488-2-Deburr								

*RP 11.8.18**12 P**RP 11.8.18**12 P**SL 11-08-29**11-08-29*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

130



QC

Quality Control

Operation  
Description

QC2- Inspect parts off machine FAI/FAIB

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp~~2011-08-18~~~~2011-08-29~~12 x

140



QC

Quality Control

QC8- Inspect parts - second check

0.00

2011/08/3012 x

150



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

12X Øm 11/08/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 71883**

Wednesday, July 13, 2011 11:09:10 AM



Page 3

Item ID: D3488-042

Accept



Setup

Start



Revision ID:

Item Name: Blade Fitting Assembly, RH

Stop



Start Date: 7/14/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

160



Powdercoat

Powder Coating

M117145

Operation  
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170



QC

Quality Control

QC3- Inspect Part Finish

0.00

12 x ✓ Mf 11/08/20

Memo

2:40

0.00

START TIME:

OVEN TEMPERATURE:

□ FINISH TIME:

320°F

3:10

12 φ Mf 11/08/20

180



HandFinish

Hand Finishing

HandFinishing

0.00

12 φ Mf 11/08/20

Memo

0.00

Install Inserts as per Dwg D3488

W/O:		WORK ORDER CHANGES					
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Wednesday, July 13, 2011 11:09:07 AM

Page 1

Work Order ID: 71883



Parent Item: D3488-042



Parent Item Name: Blade Fitting Assembly, RH

Start Date: 7/14/2011

Required Date: 7/28/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 06-02-28 JLM

IPP Rev:B As per Rev B 06-03-30 JLM

IPP Rev:C Now On Doosan Lathe JLM Verified BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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ALS7-1032-225



Purchased

No

Each 700.0000

48



INSERT

Location	Loc Qty	Loc Code
----------	---------	----------

ST282	700	
100896	100	
111529	300	
<u>111581</u>	300	

*RP 11.8.18*

11-9-0 (

48

D6103-003



Manufactured

No

Each 21.0000

12



Round Billet, Aluminum

Location	Loc Qty	Loc Code
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MAT043	21	
69901	5	
71178	16	

*71883*

*12*

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	71683
Description: Blade Fitting, RH / Turning Detail for D3488-1/-2	Part Number:	D3488-2
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 1 of 2

### FIRST ARTICLE INSPECTION CHECKLIST

First Article     Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
Ø2.150	+/-0.005	2.147	/		PP .02	
Ø2.780	+/-0.005	2.778	/		PP .15	
Ø3.125	+/-0.010	3.123	/			
Ø3.346	+/-0.010	3.345	/			
0.125 x 45°	+/-0.010 x +/-0.1°	125x45	/			
8.000	+0.030/-0.000	8.015	/			
9.250	+/-0.010	9.250	/			
0.188	+/-0.010	.188	/			
R0.032	+/-0.010	2.032	/			
R0.062	+/-0.010	2.062	/			
Ø0.297	+0.005/-0.001	.299	/			
Ø0.430	+/-0.010	.430	/			
0.100	+/-0.010	.100	/			
0.125	+/-0.010	.130	/			
2.620	+/-0.010	2.617	/			
3.500	+/-0.010	3.500	/			
1.005	+/-0.010	1.005	/			
Ø0.484	+0.005/-0.001	.485	/			
1.180	+/-0.010	1.180	/			
3.150	+/-0.010	3.150	/			
3.070	+/-0.010	3.070	/			
R0.063	+/-0.010	2.063	/			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	71883
Description: Blade Fitting, RH / Turning Detail for D3488-1/-2	Part Number:	D3488-2
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 2 of 2

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
<b>Milling Section</b>						
Ø0.508	+0.006/-0.001	.509	✓		Vern JLM	
0.750	+/-0.010	.752	✓		H-G	
1.500	+/-0.010	1.500	✓		Vern JLM	
11.18	+/-0.030	11.185	✓		H-G	
R0.062	+/-0.010	.062	✓		R-G	
0.125	+/-0.010	.128.130	✓		Vern JLM	
0.590	+/-0.010	.589	✓		H-G	
0.793	+/-0.010	.795	✓		H-G	
1.351	+/-0.010	1.351	✓		H-G	
1.317	+/-0.010	1.311	✓		Vern JLM	
1.802	+/-0.010	1.804	✓		H-G	

Measured by:	JL	Audited by:	anf	Prototype Approval:	N/A
Date:	11-08-29	Date:	11/08/20	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.03.31	New Issue	KJ/JLM	
B	08.09.19	Reformat P/O D3488-042	KJ/JLM	
C	08.12.02	Dimension 8.000 removed	KJ/JLM	anf

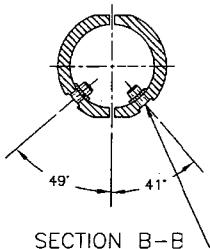
W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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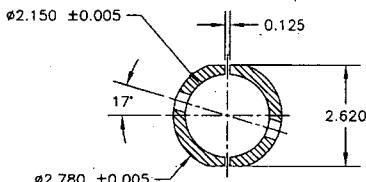
495



SECTION B-B

C'BORE  $\phi 0.430 \times 0.100$   
INSTALL ALS4-1032-225 (OR AKS4-1032-225)  
OR ALS7-1032-225 OR AKS7-1032-225)  
INSERTS AFTER FINISH  
(4 PLACES)

4



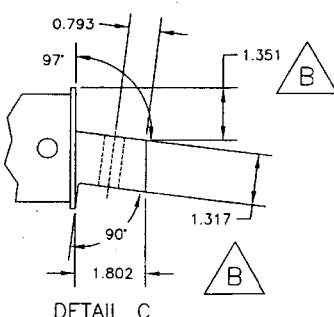
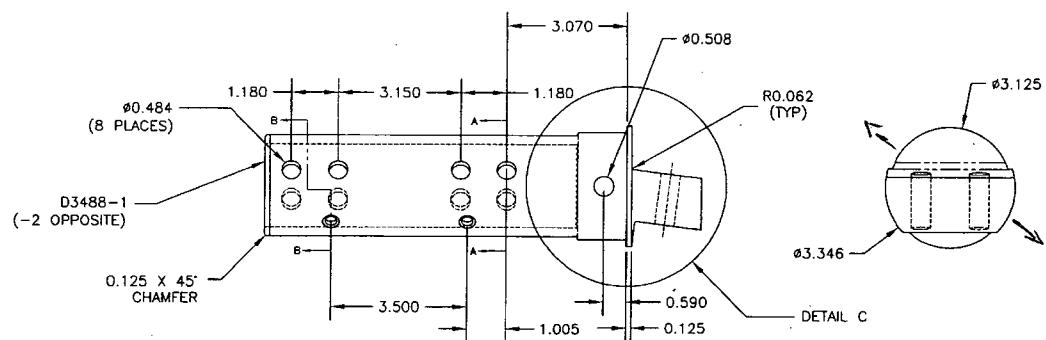
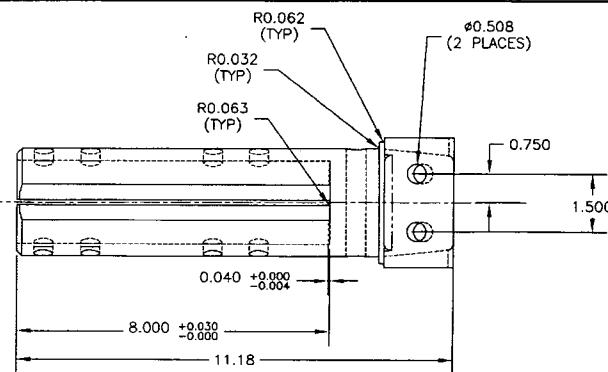
SECTION A-A

D3488-041/-042 BLADE FITTING ASSEMBLY PARTS LIST

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042	D3488-041	BLADE FITTING ASSEMBLY (LH)
X	X	D3488-042	BLADE FITTING ASSEMBLY (RH)
1	1	D3488-1	BLADE FITTING (LH)
1	1	D3488-2	BLADE FITTING (RH)
4	4	ALS4-1032-225 or AKS4-1032-225 or ALS7-1032-225 or AKS7-1032-225	INSERT

D3488-041/-042 BLADE FITTING

- 1) MATERIAL: MAKE D3488-1/-2 FROM ALUMINUM 7075-T7351 ROUND BAR PER QQ-A-225/9  
(REF. DART MATERIAL SPEC M7075T73R)
- 2) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) INSTALL INSERTS AFTER POWDER COAT
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D3488-041 SHOWN (D3488-042 OPPOSITE)

RELEASED  
01.03.07 PH  
PER 05  
ECN #784

# 71883

B	06.03.15	CHANCE THICKNESS
A	05.12.20	NEW ISSUE
DESIGN	PH	DRAWN BY PH
CHECKED	PH	APPROVED PH
DRAWING NO.	D3488	REV. B
DATE	06.03.15	SHEET 1 OF 1
TITLE	BLADE FITTING	SCALE 1:3

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806

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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